FLEXIBLE NON-METALLIC SEALS MADE OF NON-WOVEN FABRIC WITH INSERTS

ABSTRACT OF THE DISCLOSURE

A seal has a non-woven fabric folded along lines transverse to the opposite side of the seal and secured by adhesive to fabric strips. The non-woven fabric forms elongated cells with a plurality of the cells receiving inserts to increase seal stiffness. By securing one of these strips to a stationary component of the sealing surfaces, the opposite strip may expand or collapse relative to a movable sealing surface to accommodate excursions of that surface. Multiple layers of cells may be provided in the seals. The inserts may have various cross-sectional configurations including circular, triangular or rhombic and formed of tubes, solid rods or coiled springs.